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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/603,832 | 06/26/2000 | Leslie H. Kondejewski | 7900-0015.30 | 2421 |

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EXAMINER

CHAKRABARTI, ARUN K

ART UNIT

PAPER NUMBER

1634

DATE MAILED: 06/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/603,832

Applicant(s)

Kondejewski

Examiner

Arun Chakrabarti

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 29, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-38 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-25 and 30-34 is/are rejected.
- 7) ☒ Claim(s) 26-29 and 35-38 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 0503 6) ☒ Other: Detailed Action

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DETAILED ACTION

Specification

1. Claims 1-20 have been canceled. New claims 21-38 have been added.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 21-25 and 30-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Cooper et al. (U.S. Patent 6,174,528 B1) (January 16, 2001).

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Cooper et al teaches a coiled-coil polypeptide comprising the formula (abicidefigi)_n, where I= 1,2,-----,n, and n is at least three (Example 11, Column 14, line 55 to column 15, line 24 and Example 18, Column 18, line 50 to column 19, line 13), the polypeptide being prepared by

(a) independently inserting an amino acid selected from the group consisting of leucine, isoleucine, valine, phenylalanine, methionine, tyrosine, and derivatives thereof, into each of the a and d positions (Column 5, line 61 to Column 6, line 23); and

(b) selecting inherently a solvent-accessible region of an epitope of a selected natural protein, wherein the region is not in a coiled-coil conformation in its native state, and inserting the amino acids from the region into the bi, ci, ei, fi, and gi positions, wherein (abicidefigi)_n forms a coiled-coil (Column 5, line 61 to Column 6, line 23 and Example 11, Column 14, line 55 to column 15, line 24 and Example 18, Column 18, line 50 to column 19, line 13). This inherence is borne out of the fact that "b, c, f positions are generally polar and charged" as taught by Cooper et al (Column 18, lines 58-60). It is well-known to an ordinary practitioner that polar and charged moieties of a chemical compound are accessible to solvents, whereas apolar residues (e.g., a and d positions of the polypeptide) are not accessible to solvents.

Moreover, it has been explicitly taught and suggested by Cooper et al, "It has also been noted that when positions a and d are occupied by V and L, or I and L, a coiled coil dimer is favoured whereas I and I favour trimer formation, and L and I favour tetramer interactions (Example 18, Column 18, lines 60-64)".

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Cooper et al teaches the polypeptide, wherein a is isoleucine and d is leucine (Example 11, Column 14, line 65 to Column 15, line 23 and Example 18, Column 18, lines 60-64).

Cooper et al teaches the polypeptide, wherein the coiled-coil polypeptide is comprised of two polypeptide chains arranged in a parallel configuration (Example 18, Column 18, lines 53-57).

Cooper et al teaches the polypeptide, wherein n is between about 3 and 20 (3 and 4 to be precise; Example 11, Column 14, line 65 to Column 15, line 23 and Example 18, Column 18, lines 60-64).

Cooper et al teaches the polypeptide, wherein n is between about 5 and about 10 (7 to be precise; Example 11, Column 15, lines 3-23).

Allowable Subject Matter

4. Claims 26-29 and 35-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Amendment

5. In response to amendment, all previous 103(a) rejections have been withdrawn. However, new 102(e) rejection has been included. Claims 26-29 and 35-38 have been considered as allowable subject matter.

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Response to Arguments

6. Applicant's arguments with respect to all pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's submission of an information disclosure statement under 37 CFR 1.97© with the fee set forth in 37 CFR 1.17(p) on May 29, 2003 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(I). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun Chakrabarti, Ph.D. whose telephone number is (703)

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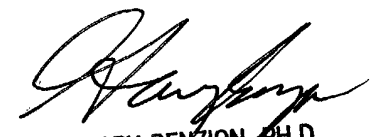
306-5818. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion, can be reached on (703) 308-1119. Any inquiry of a general nature or relating to the status of this application should be directed to the Group analyst Chantae Dessau whose telephone number is (703) 605-1237. Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission via the P.T.O. Fax Center located in Crystal Mall 1. The CM1 Fax Center numbers for Technology Center 1600 are either (703) 305-3014 or (703) 308-4242. Please note that the faxing of such papers must conform with the Notice to Comply published in the Official Gazette OG 30 (November 15, 1989).

Arun Chakrabarti

Patent Examiner

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June 12, 2003



GARY BENZION, PH.D
SUPERVISORY PATENT EXAMINER
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